

Election/Restrictions

1. Applicant's election without traverse of claims 1, 2 and 7-10 in the reply filed on 3/6/2008 is acknowledged.
2. Claims 3-6 and 11-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/6/2008.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The dimensional limitations of the claim are confusing to Examiner, because they are not clear and contradict conventional reasoning in describing nanotubes. After consulting the specification Examiner is of the opinion that the intended nanotube length is from 0.1-30 microns and diameter is from 1-300 nm.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Tobita et al. (US 2003/0096104 A1).

Tobita et al. disclose a carbon nanotube oriented composite comprising rubber as a matrix material (abstract). At least a part of the carbon nanotubes are contacted with each other to become continuous from one end to the other end as evidenced by the increase electrical conductivity in a given direction [0008]. The nanotubes have diameters ranging from 1-20 nanometers and lengths from 50 nm to 100 microns [0021]. The rubber matrix may be butyl rubber [0025]. The composition of the carbon nanotube oriented composite contains 0.01-100 parts carbon nanotubes by mass relative to 100 parts by mass of rubber [0030].

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tobita et al. (US 2003/0096104 A1).

Although Tobita et al. do not explicitly teach the claimed feature of the claimed thermal conductivity, it is reasonable to presume that said property is inherent to Tobita et al. Support for said presumption is found in the use of like materials (i.e. oriented carbon nanotubes in butyl rubber at the claimed levels). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property

of the claimed thermal conductivity would obviously have been present one the Tobita et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571.272.1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1794

/Arti Singh/
Primary Examiner, Art Unit 1794